



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/868,462	08/10/2001	Richard Bugaj	3961.47USWO	1247

23552 7590 03/26/2004

MERCHANT & GOULD PC  
P.O. BOX 2903  
MINNEAPOLIS, MN 55402-0903

EXAMINER

WILLIAMS, THOMAS J

ART UNIT	PAPER NUMBER
----------	--------------

3683

DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/868,462	<b>Applicant(s)</b> BUGAJ, RICHARD	
	<b>Examiner</b> Thomas J. Williams	<b>Art Unit</b> 3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 January 0204.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 7-51 and 58-68 is/are pending in the application.
- 4a) Of the above claim(s) 7-51 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 58-60 and 63-66 is/are rejected.
- 7) ☒ Claim(s) 61, 62, 67 and 68 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br/>Paper No(s)/Mail Date _____</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)<br/>Paper No(s)/Mail Date. _____</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6) <input type="checkbox"/> Other: _____</p> |
|---|--|

### DETAILED ACTION

1. Acknowledgment is made in the receipt of the amendment filed January 5, 2004.

#### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 58 is rejected under 35 U.S.C. 102(b) as being anticipated by US 5,098,120 to Hayashi et al.

Re-claim 58, Hayashi et al. discloses a shock absorber, comprising: a first cylinder 141 has a liquid filled first piston chamber, the first piston chamber is sealed from the atmosphere; a first piston 142 is received in the first piston chamber; a first dampener (interpreted as the passages in the piston, see figure 1 and column 10 lines 2-6); a second cylinder 161 has a liquid filled second piston chamber, the second piston chamber is sealed from the atmosphere, the second cylinder is axially aligned with the first cylinder, the first and second cylinders are mutually axially displaceable (cylinder 141 is connected at 148 to a vehicle body, cylinder 161 is connected at 149 to an axle, cylinder 141 will move relative to cylinder 161); a second piston 163 is received in the second piston chamber and is axially displaceable through the second piston chamber (see figures 2 and 3, note change in position of the piston); a second dampener is provided for dampening axial displacement of the *first piston* through the *first piston chamber*; a piston rod 143 axially extends between the first and second piston chambers and is connected to

Art Unit: 3683

the first and second pistons; mountings 148 and 149 secure the first and second cylinders to a body and wheel suspension of a vehicle, respectively.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 59 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi et al. in view of US 2,774,446 to Bourcier De Carbon.

Re-claims 59 and 60, Hayashi et al. discloses a gas chamber located within the first cylinder. However, Hayashi et al. fails to specify if the gas is separated from the liquid by a first dividing piston and if a valve is connected to the gas chamber. Bourcier De Carbon teaches a shock absorber having a gas chamber within a cylinder, the gas chamber is separated from the liquid by a first dividing piston, a valve is connected to the gas chamber. It would have been obvious to one of ordinary skill in the art to have provided the shock absorber of Hayashi et al. with a first dividing piston and valve as taught by Bourcier De Carbon, thus preventing the gas from mixing with the liquid as well as providing a means to change the spring action of the gas.

6. Claims 63-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi et al. in view of US 4,858,898 to Niikura et al.

Re-claims 63 and 64, Hayashi et al. fails to teach a gas chamber formed in a third cylinder connected to the first cylinder. Niikura et al. teaches a separate cylinder containing a first gas chamber connected to a first cylinder, the separate cylinder replaces a gas first gas

Art Unit: 3683

chamber located in the first cylinder. Niikura et al. further teaches the use of a valve connected to the first gas chamber for pressurizing the gas chamber. It would have been obvious to one of ordinary skill in the art to have provided the shock absorber of Hayashi et al. with the third cylinder containing a first gas chamber exterior to the first cylinder as taught by Niikura et al., thus reducing the overall length of the shock absorber.

Re-claims 65 and 66, Hayashi et al. teaches a fourth cylinder 581 divided into a third sub-chamber 584 and fourth sub-chamber 583; a second conduit b' communicates the second piston chamber (in cylinder 533 also 161) with the third sub-chamber, the fourth sub-chamber contains a gas. However, Hayashi et al. fails to teach a piston separating the third and fourth sub-chamber and a valve for adjusting the gas pressure in the gas chamber. Niikura et al. teaches a separate cylinder attached to a main cylinder, the separate cylinder has an oil chamber and a gas chamber separated by a piston, wherein the gas sub-chamber is provided with a pressurizing means, such as a valve. It would have been obvious to one of ordinary skill in the art to have provided the fourth cylinder of Hayashi et al. with a separating piston and a valve as taught by Niikura et al., the piston would have an increased lifespan over the diaphragm used by Hayashi et al., the valve would have provided an easy means by which to pressurize the gas chamber.

***Allowable Subject Matter***

7. Claims 61, 62, 67 and 68 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

8. Applicant's arguments with respect to claims 58-68 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Amended claim 58 now recites the first piston having first and second dampening features, interpreted as a plurality of valve passages in the first piston. The previously claimed dampening feature in a second piston has been removed. It is unclear to the examiner if this was an attempt to broaden the coverage of the claimed invention. It is the opinion of the examiner that the claims currently presented in light of the prior art can be rejected.

10. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Thomas Williams whose telephone number is (703) 305-1346.

Art Unit: 3683

The examiner can normally be reached on Monday-Thursday from 6:30 AM to 4:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder, can be reached at (703) 308-3421. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

TJW

March 19, 2004

**THOMAS WILLIAMS  
PATENT EXAMINER**

*Thomas Williams*

AV 3683

3-19-04